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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/746,232	12/21/2000	Rajeev Krishnamurthi	QCPA483C	4079

23696 7590 06/23/2006

QUALCOMM, INC
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EXAMINER

SOBUTKA, PHILIP

ART UNIT	PAPER NUMBER
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2618

DATE MAILED: 06/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/746,232	Applicant(s) KRISHNAMURTHI ET AL.	
	Examiner Philip J. Sobutka	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15, 19-26, 28-32 is/are rejected.
- 7) ☒ Claim(s) 16-18 and 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4/6/6</u> . | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. Claims 15,19,25,27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US 5,889,844) in view of Raleigh et al (US 6,815,546).

Consider claims 15, 27 . Kim teaches a telecommunication messaging apparatus comprising: a mobile switching center (MSC) to engage in a service negotiation with a wireless subscriber unit in communication with a first source and a second source using a traffic channel (Kim column 4, lines 23-35), to enable concurrent communication between the wireless subscriber unit and the first and second sources using the traffic channel (Kim column 4, lines 36-65, column 4, line 66 – column 5, line 47).

Kim lacks a teaching of allocating data transmission rates on the traffic channel to each of the first and second source based on the service negotiation.

Raleigh teaches a service negotiation allocating channels based on data rates (Raleigh column 3, lines 8-30). Raleigh teaches that this allocation allows accommodation of multiple data rate sources while maximizing spectral efficiency. Therefore, it would have been obvious to one of ordinary skill in the art to modify Kim to allocate data rates in order to accommodate multiple data rate sources while maximizing spectral efficiency as taught by Raleigh.

As to claim 19, Kim in view of Raleigh as applied to claim 15 teaches a base station in communication with the wireless subscriber unit and the MSC to relay service

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negotiation messages between the wireless subscriber unit and the MSC (Kim see fig 1A).

As to claim 25, Kim in view of Raleigh as applied to claim 19, lack a teaching of at least one of the wireless subscriber unit, the base station, and the mobile switching center communicate using code division multiple access (CDMA) modulation techniques. Official Notice is taken that CDMA is well know in the art. It would have been obvious to one of ordinary skill in the art to modify Kim use CDMA in order to provide superior interference reduction and privacy

Consider claim 28. Kim teaches a method for a mobile switching center (MSC) to establish communication between a wireless subscriber unit and a first source and a second source using a traffic channel, the method comprising:

initiating a service negotiation with the wireless subscriber unit, and enabling concurrent communication between the wireless subscriber unit and the first and second sources using the traffic channel based on the allocated data transmission rates (Kim column 4, lines 36-65, column 4, line 66 – column 5, line 47).

Kim lacks a teaching of allocating data transmission rates on the traffic channel to each of the first and second source based on the service negotiation.

Raleigh teaches a service negotiation allocating channels based on data rates (Raleigh column 3, lines 8-30). Raleigh teaches that this allocation allows accommodation of multiple data rate sources while maximizing spectral efficiency. Therefore, it would have been obvious to one of ordinary skill in the art to modify Kim to

allocate data rates in order to accommodate multiple data rate sources while maximizing spectral efficiency as taught by Raleigh.

As to claim 29 Kim in view of Raleigh as applied to claim 28, teaches delivering a first message by the MSC to a base station in communication with the wireless subscriber unit for initiating the service negotiation; negotiating a new service configuration by the base station and the subscriber unit, the new service configuration providing for concurrent connection of both a new call and an existing call; and connecting the new call and the existing call using the new service configuration (Kim column 4, lines 36-65, column 4, line 66 – column 5, line 47).

As to claim 30, Kim in view of Raleigh as applied to claim 29 would incorporate that the first message in the service negotiation would effectively be a Change Service Command Message.

As to claim 31, Kim in view of Raleigh as applied to claim 30, would provide for the connection of both the new call and the existing call (Kim column 4, lines 36-65, column 4, line 66 – column 5, line 47).

As to claim 32, Kim in view of Raleigh would of course negotiates the new service configuration based on the proposed service configuration (Kim column 4, lines 36-65, column 4, line 66 – column 5, line 47).

2. Claims 20-24,26, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim in view of Raleigh and in view of Czaja et al (US 6,078,570).

Consider claim 20. Kim in view of Raleigh as applied to claim 19, lacks a teaching of the base station comprising: a base station message processor to analyze

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received messages and to determine messages to be generated and transmitted in association with the service negotiation; a base station message generator to generate messages under direction from the message processor and a base station transceiver to transmit and receive messages associated with the service negotiation.

Czaja teaches a message processor in a base station for receiving, analyzing and generating messages associated with service negotiation, i.e. hand-off (Czaja see especially fig 2, items 230,232, column 4, lines 30-39, column 5, lines 5-15). It would have been obvious to one of ordinary skill in the art to modify Kim to use the message processor as taught by Czaja in order to provide dedicated processing capabilities for analysis and direction of hand off.

Consider claim 21 Kim in view of Raleigh and in view of Czaja lacks a teaching of the subscriber also including a message processor. It would have been obvious to one of ordinary skill in the art to modify Kim to equip the subscriber with a similar message processor in order to perform the method at the subscriber unit.

As to claim 22, Kim in view of Raleigh and in view of Czaja would incorporate that the first message in the service negotiation would effectively be a Change Service Command Message.

As to claim 23, Kim in view of Raleigh and in view of Czaja would negotiate service when a new call for communication is arriving for the wireless subscriber unit from the first source when the wireless subscriber unit is already in an existing call with the second source (Kim column 4, lines 36-65, column 4, line 66 – column 5, line 47).

As to claim 24, Kim in view of Raleigh and in view of Czaja would propose a new service configuration which accommodates both the existing call and the new call (Kim column 4, lines 36-65, column 4, line 66 – column 5, line 47).

As to claim 26, Kim in view of Raleigh and in view of Czaja as applied to claim 21 teach a target base station in communication with the subscriber unit (Kim see figure 1A).

Allowable Subject Matter

3. Claims 16-18 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Consider claim 16. The nearest prior art as shown in Kim and Raleigh fails to teach the apparatus of claim 15, wherein at least one of the first and second sources are communicating by non-voice data.

Consider claim 17. The nearest prior art as shown in Kim and Raleigh fails to teach the apparatus of claim 15, the MSC to determine a primary service option and a secondary service option corresponding to the first and second sources for communicating with the wireless subscriber using the traffic channel.

Consider claim 18. The nearest prior art as shown in Kim and Raleigh fails to teach the apparatus of claim 17, wherein the first and second sources communicate with the wireless subscriber unit using data frames, and wherein the MSC comprises a multiplexer to define the number of bits of each data frame to be allocated for the primary and secondary service options.

Consider claim 27. The nearest prior art as shown in Kim and Raleigh fails to teach the apparatus of claim 15 wherein the MSC engages in the service negotiation with a wireless subscriber unit, allocates data transmission rates on the traffic channel to each of the first and second sources based on the service negotiation and enables the concurrent communication between the wireless subscriber unit and the first and second sources using the traffic channel without an input from a user of the wireless unit.

Response to Amendment

4. Applicant's arguments with respect to claims 15-32 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip J. Sobutka whose telephone number is 571-272-7887. The examiner can normally be reached on Monday - Friday, 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on 571-272-4177. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and (571) 273-8300 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-7887.

Philip Sobutka

Pjs
June 19, 2006

A handwritten signature in black ink, appearing to read 'Matthew D. Anderson', with a long, sweeping horizontal line extending to the right.

Matthew D. Anderson
Supervisory Patent Examiner